

Quantum

XCELLIS HIGH-PERFORMANCE SHARED STORAGE



DATASHEET

FEATURES & BENEFITS

Exceptional Performance

Xcellis optimizes video production tasks, accelerates time to insight, and empowers organizations to do more with their data.

Multi-Protocol Access Built In

Optimizes workflow efficiency and data access by enabling all clients access to the same data regardless of protocol, on a scale-out NAS or SAN.

Independent Scalability

Add client nodes and storage arrays independently to scale from the smallest configurations to the largest with no forklift upgrades or extra accelerators.

Expand Infrastructure Without Limits

Support for billions of files across up to 64 virtual file systems. Virtually unlimited capacity. Scale to hundreds of petabytes. Extend scalability even further using cloud, object storage, or tape.

Better Protect Valuable Assets

Integrated with the capability to protect data through automated data copies, versioning, and replication.

Powered by StorNext®

Xcellis is optimized to run on StorNext, an award-winning file system that provides advanced data management for high-performance, multi-tier, shared storage.

Simplified Management Tools

Built-in deployment, management, monitoring, and reporting for multiple systems from a single-pane-of-glass interface.

Dynamic Application Environment

Xcellis has the unique capability of supporting applications running on the Workflow Director as virtual machines (VMs) using a feature called the Dynamic Application Environment.

LEARN MORE:

www.quantum.com/xcellis

Primary Storage Optimized for Demanding Video Workflows

Organizations that work with massive volumes of rich media constantly face challenges related to accessing content, preserving it over the long term, and protecting it from external and internal threats. Teams also need to manipulate, analyze, and edit content to extract its maximum value within tight production deadlines.

To meet these demands, a storage foundation needs to be scalable, flexible for varying requirements, and accessible across multiple geographic locations, while delivering unparalleled performance and reliability. Tested in the most demanding data-intensive environments, Quantum Xcellis® high-performance shared storage is the core building block for a truly optimized and cost-effective end-to-end workflow.

UNPARALLELED PLAYBACK PERFORMANCE

Whether you are a post-production editor working on parallel streams of 8K content for playout in immersive virtual reality, or an autonomous vehicle manufacturer optimizing your latest self-driving software algorithms based on real-world test results, having a high-speed storage infrastructure delivering data where and when it is needed most is critical. Now leveraging the benefits that come with an improved hardware platform, Xcellis will provide even higher levels of streaming performance for video playback, with even greater reliability. So whether it's over a NAS, SAN, IB, or NVMeoF storage architecture, or all simultaneously, Xcellis provides the performance needed for the most demanding video workflows.

COMPREHENSIVE UNIFIED ACCESSIBILITY

Business projects today can have long time horizons, span multiple geographies, and involve hundreds—if not thousands—of contributors. In this context, supporting a collaborative environment is no longer optional—it's mandatory. Not only does Xcellis present data across all logical storage tiers in one addressable global namespace, but it also allows native accessibility from users running macOS, Linux, and Windows. And with the ability to simultaneously access this data

over Ethernet or Fibre Channel networking, Xcellis provides the right level of performance to the right people, improves collaboration, and simplifies deployments.

COST-EFFECTIVE SCALABILITY WITH ZERO DOWNTIME

Other scalable storage systems require additional system acceleration units or compute-heavy expansion nodes in order to scale. These units increase the cost and network complexity of scaling. Xcellis provides unmatched flexibility by enabling nodes and storage arrays to be scaled up or out independently, so every dollar invested pays off in more capacity and greater bandwidth. Furthermore, by providing a gateway to a multi-tiered storage infrastructure that incorporates flash, disk, tape, and cloud-based storage, organizations can optimize performance and capacity without overinvesting.

INTEGRATED DATA PROTECTION FUNCTIONALITY

Xcellis offers a variety of important features that ensure data protection of valuable content over its entire lifecycle. Customers can easily copy files to offsite tiers and take advantage of versioning to roll back to an earlier point in time, as well as set up automated replication for disaster recovery purposes—all of which is designed to protect valuable digital assets.

HIGHLY ADAPTABLE CONVERGED ARCHITECTURE

Only Xcellis allows for such a high number of configurable options to optimize the entire data path between user and storage media. Whether your choice is NAS, SAN, IB, or NVMe access, organizations can maximize their networking investment and still function effectively—even across hybrid architectures. By using converged storage and access, organizations can scale their storage system more efficiently by maximizing their investment to benefit all connected users.

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TECHNICAL SPECIFICATIONS

SYSTEM

Configuration Options	Available with combined metadata and user storage or dedicated metadata storage
Storage Support	Includes Quantum QXS™ 12G storage for combined metadata and data options; supports Quantum or 3rd-party storage with dedicated metadata models
Workflow Director Nodes	Dual rack servers Redundant power supplies Dual eight-core high-performance Intel Silver CPUs
Workflow Director Storage	Choice of Quantum QXS-3 12G or QXS-4 12G Dual redundant high-performance controllers Available in 2U12, 2U24, and 5U84 options

LICENSING

Included StorNext Software	StorNext High-Availability License Option, ten SAN clients available to the user for any OS type, one embedded SAN client for each Xcellis Workflow Director Node, and a Distributed Data Mover license (for the secondary node)
Optional StorNext LAN Gateway License	Allows connection of StorNext LAN clients directly to Xcellis Does not require per-client licensing
Optional NAS Connectivity License	Allows connection of SMB and NFS clients directly to Xcellis Does not require per-client licensing

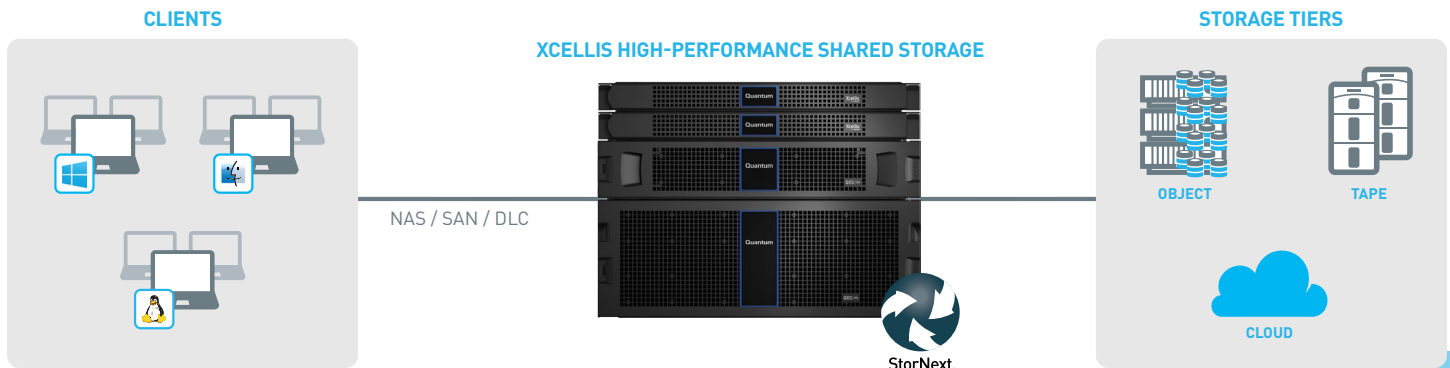
CONNECTIVITY OPTIONS

Optional Ethernet	Dual 100 Gb / 40 Gb, Dual 25 Gb / 10 Gb, Quad 10GBASE-T
Optional Fibre Channel	Dual 32 Gb Optical or Quad 16 Gb Optical
Onboard Ethernet	Quad 1 Gb for service, management, and metadata networks
Client Protocol Support	StorNext SAN, StorNext LAN, SMB, NFS, S3, Active Directory, OpenLDAP, RESTful API
Client Support	Linux, Mac OS X, Windows

XCELLIS STORAGE NODES

	QXS-312 12G	QXS-324 12G	QXS-412 12G	QXS-424 12G	QXS-484 12G
Usage	Combined user data and metadata	Dedicated or combined metadata	Combined user data and metadata	Dedicated or combined metadata	Combined user data and metadata
Drive Support	4 TB 7.2k RPM 3.5" NL-SAS 8 TB 7.2k RPM 3.5" NL-SAS 8 TB 7.2k RPM 3.5" NL-SAS SED 10 TB 7.2k RPM 3.5" NL-SAS 12 TB 7.2k RPM 3.5" NL-SAS 12 TB 7.2k RPM 3.5" NL-SAS SED 14 TB 7.2k RPM 3.5" NL-SAS 16 TB 7.2k RPM 3.5" NL-SAS	600 GB 10k RPM 2.5" SAS 600 GB 10k RPM 2.5" SAS SED 1.2 TB 10k RPM 2.5" SAS 1.2 TB 10k RPM 2.5" SAS SED 2.4 TB 10k RPM 2.5" SAS	4 TB 7.2k RPM 3.5" NL-SAS 8 TB 7.2k RPM 3.5" NL-SAS 8 TB 7.2k RPM 3.5" NL-SAS SED 10 TB 7.2k RPM 3.5" NL-SAS 12 TB 7.2k RPM 3.5" NL-SAS 12 TB 7.2k RPM 3.5" NL-SAS SED 14 TB 7.2k RPM 3.5" NL-SAS 16 TB 7.2k RPM 3.5" NL-SAS	600 GB 10k RPM 2.5" SAS 600 GB 10k RPM 2.5" SAS SED 1.2 TB 10k RPM 2.5" SAS 1.2 TB 10k RPM 2.5" SAS SED 1.92 TB 1D WPD 2.5" SSD 2.4 TB 10k RPM 2.5" SAS 800 GB 3D WPD 2.5" SSD 800 GB 3D WPD 2.5" SSD SED 1.6 TB 3D WPD 2.5" SSD 3.84 TB 1D WPD 2.5" SSD 7.68 TB 1D WPD 2.5" SSD 15.36 TB 1D WPD 2.5" SSD	4 TB 7.2k RPM 3.5" NL-SAS 8 TB 7.2k RPM 3.5" NL-SAS 8 TB 7.2k RPM 3.5" NL-SAS SED 10 TB 7.2k RPM 3.5" NL-SAS 12 TB 7.2k RPM 3.5" NL-SAS 12 TB 7.2k RPM 3.5" NL-SAS SED 14 TB 7.2k RPM 3.5" NL-SAS 16 TB 7.2k RPM 3.5" NL-SAS

Fig. 1: Xcellis scale-out storage integrates seamlessly into your workflow with the performance and data management capabilities needed for high-value and data-intensive workloads.



Quantum

Quantum technology and services help customers capture, create, and share digital content—and preserve and protect it for decades at the lowest cost. Quantum's platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and low-cost archiving. Every day the world's leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at www.quantum.com.

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